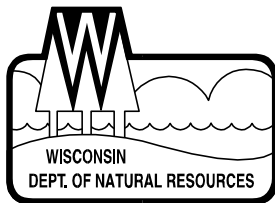


Wisconsin Department of Natural Resources 2003-2004 Snowmobile Enforcement & Safety Report



**Produced by the Bureau of Law
Enforcement, Recreation Enforcement
and Education Section
PUB-LE-203 2004**



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**2003-2004 Snowmobile Program Report
Summary**

The 2003-2004 Snowmobile Program Report was compiled from the 25 fatal investigations and other data collected during the fiscal year 2003-2004 (a fiscal year runs from July 1 – June 30).

Conservation Wardens investigate all fatal snowmobile incidents and as such, Wisconsin law requires that a conservation warden or law enforcement officer be notified immediately of any snowmobile incident that results in an injury requiring medical treatment by a physician. In addition, the operator(s) involved in these reportable incidents must file a written report with the Department of Natural Resources within 10 days, in so far as they are capable of doing so.

FATAL INCIDENT CAUSES

The primary type of crash causing the victim's death continues to be striking a fixed object such as trees or ice/rock. The secondary type of crash leading to the victim's death this reporting period was collision with another snowmobile. The leading contributing factors were alcohol and excessive speed.

There were 12 (9 the previous year) fatal crashes that investigators directly identified speed as a contributing factor to the death of the operator/passenger. Of the 12 speed related fatalities, 9 of those that died had consumed alcohol or 75% (77% the previous year) of the speed related victims.

Alcohol was identified as another major contributing factor. The 2003-04 laws expressly stated a person is under the influence of alcohol once their blood alcohol level reaches 0.08; however, for the purposes of this report, any alcohol level identified in the coroner's report (by percent) is considered to be a contributing factor.

Seventy-two percent (18 of the victims) of the known toxicology reports performed show alcohol was consumed by the victim. Toxicology examinations were not performed on six victims; one victim had no alcohol present. A review of the alcohol involved fatalities show that no victims had less than 0.03 alcohol levels. Twenty percent of the victims that consumed alcohol showed levels less than .08%. Twenty percent of the victims that consumed alcohol had levels from 0.10 to 0.199%. The other thirty-six percent of the alcohol related victims were reported at 0.20 or above, with one victim result at 0.284.

WHO WAS INVOLVED

Twenty-four of the 25 victims were male. Victim ages ranged from 15-60 years, with the average age 35.2 years old; last season's average age was 35.3 years. The largest percentage of victims was age 30-39 years. The second largest age group was age 40-49 years at 24%. Three children under 16 were killed this reporting period. Of the 25 fatal incidents, 19 of the victims were Wisconsin residents while 4 were from Illinois and 2 from Minnesota. The majority of the victims (22) had not received Wisconsin Snowmobile Safety Training. Of the 25 victims, 18 were known to have been wearing a helmet, 3 were not wearing a helmet.

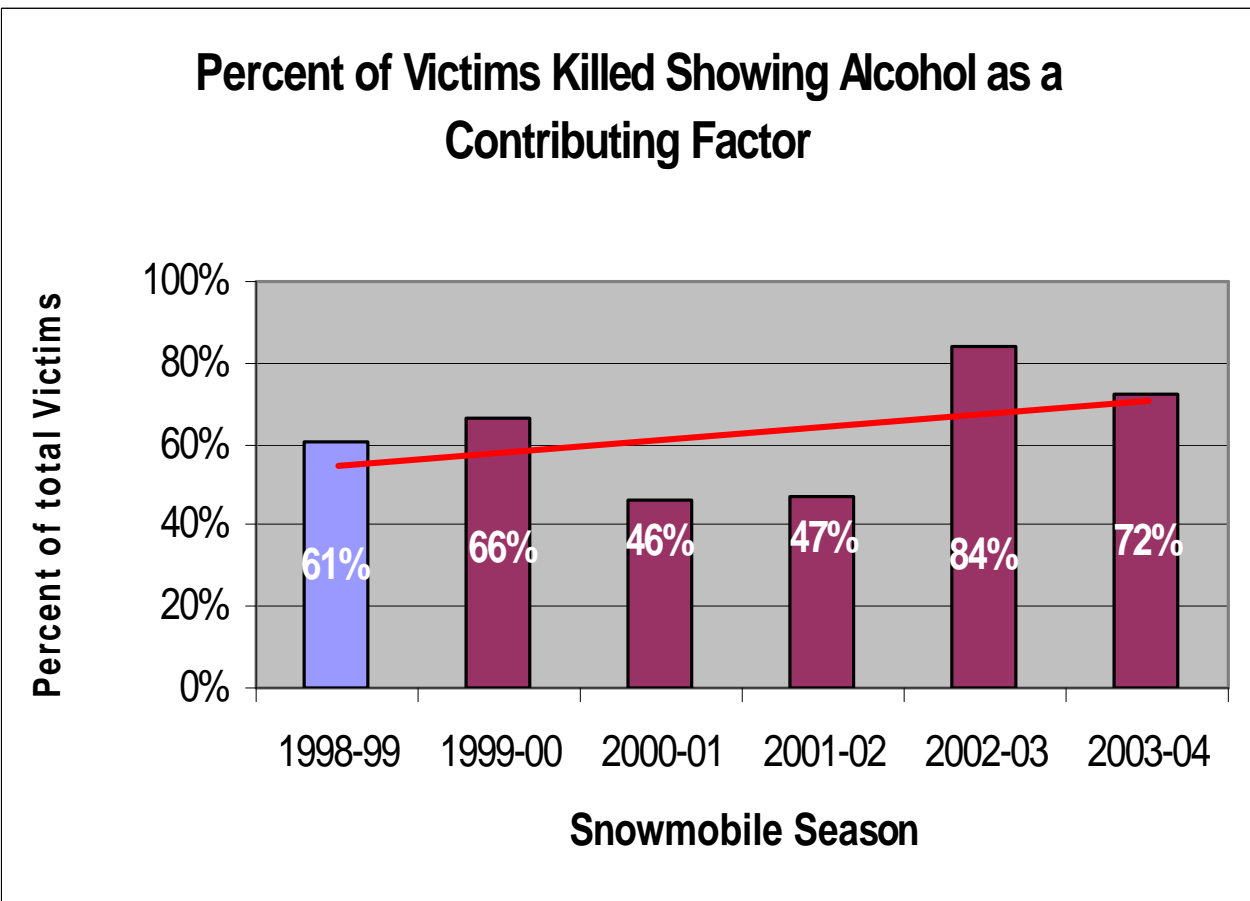
WHEN DO THE FATAL INCIDENTS OCCUR

A correlation was observed by reviewing fatality statistics for the past ten years. Inferences can be drawn as to the time of day and the day of the week that fatal incidents are most likely to occur. Statistics show the majority of the snowmobilers were fatally injured on Friday, Saturday or Sunday. Saturdays show a higher number of victims over any other day. The time of day/night that snowmobilers are most likely to be involved in a deadly incident is between the hours of 7:00 pm - 3:00 am.

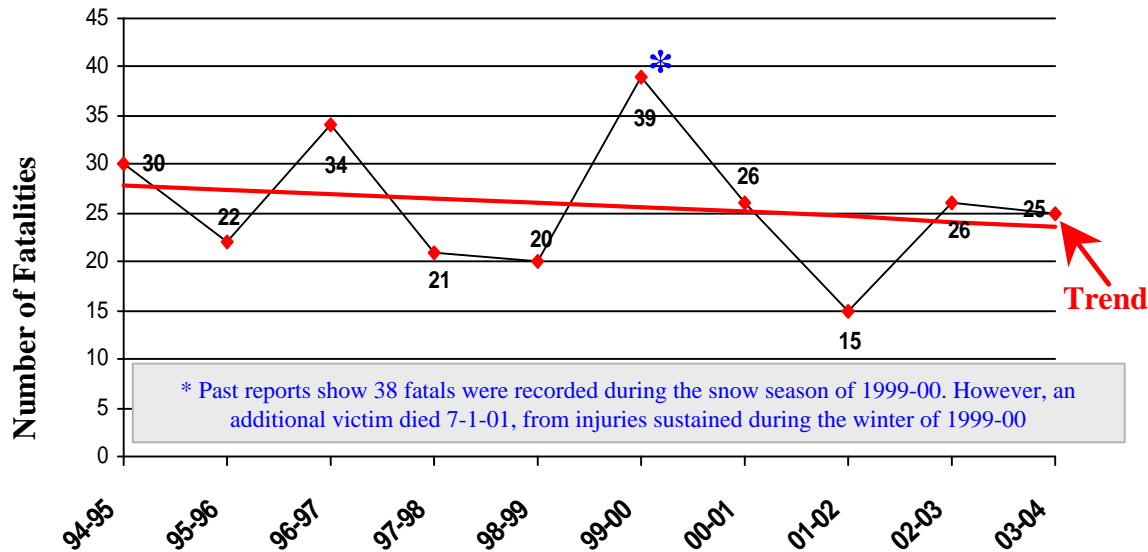
FACTORS TO BE CONSIDERED

The statewide 2003-2004 snowmobile season never really acquired traditional snowfall depths, it began late and was essentially the same as the previous year. Open water remained a hazard throughout the season. Open water was a contributing factor for six of the fatal incidents. Many trails in the southern portion of the state did not open the entire season and trails in the north were plagued with poor snow depths resulting in less than prime conditions.

Wisconsin has been tracking alcohol involved fatalities for many years with traditional results showing alcohol as a main contributing factor.



History of Snowmobile Fatalities

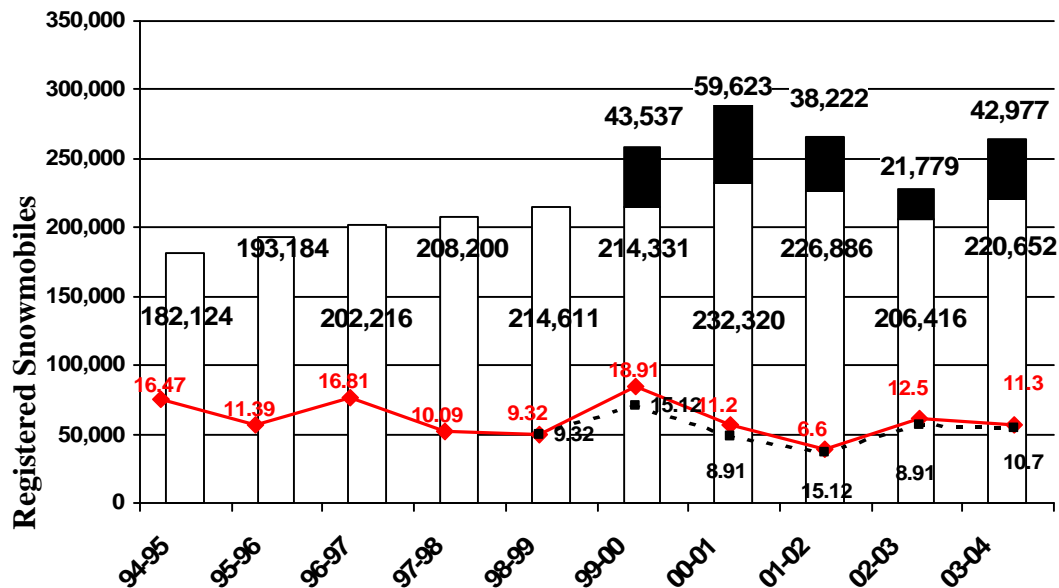


The 10-year fatal average is 25 deaths per year.

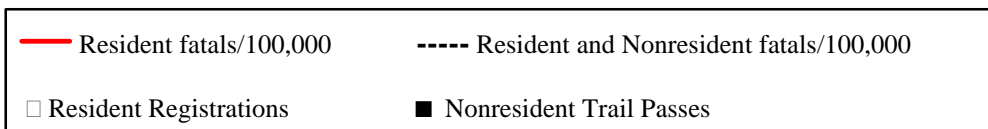
The amount of snowfall and number of hours ridden, are not reflected and can affect the number of fatalities that occur.

Beginning the 1999-2000 season, the nonresident trail pass became required for all snowmobiles not registered in WI and as a result the Department was able to identify the number of nonresident snowmobiles operated in WI.

Snowmobile Fatality Rate to Number of Snowmobiles Registered



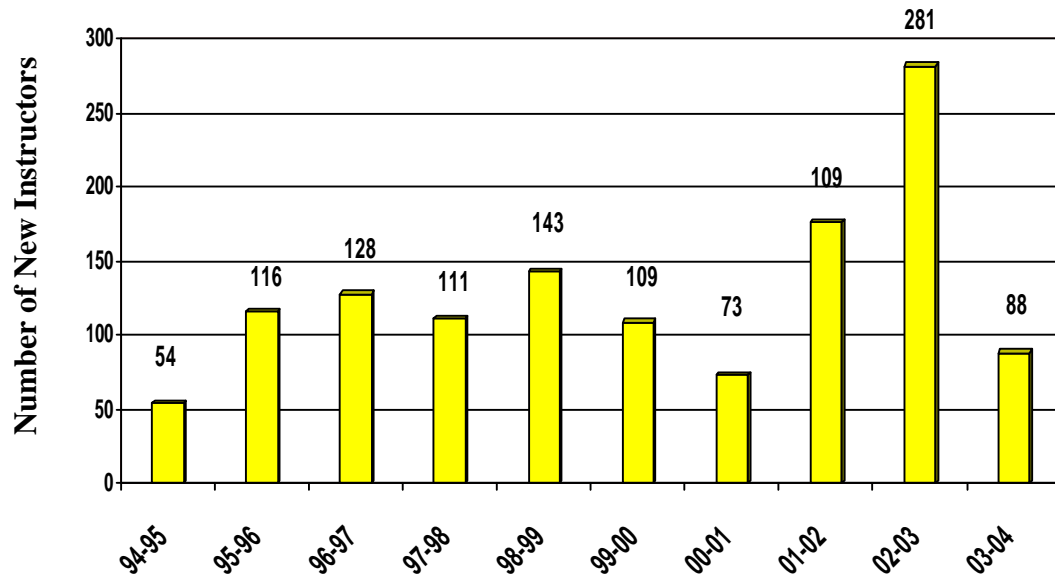
Fatalities per 100,000 Registrations.



History of Newly Recruited Snowmobile Education Instructors

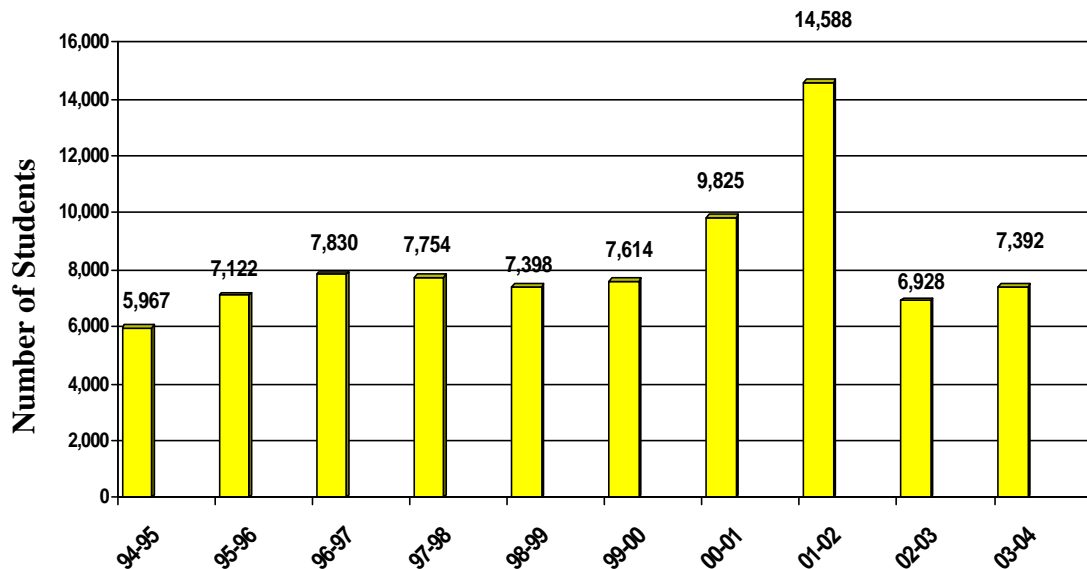
The total number of active instructors for 2003-2004 was 1,414. This number is up due to a push to activate new instructors largely with the help of the Association of Wisconsin Snowmobile Clubs.

Over 239,631 students have been certified by volunteer instructors.



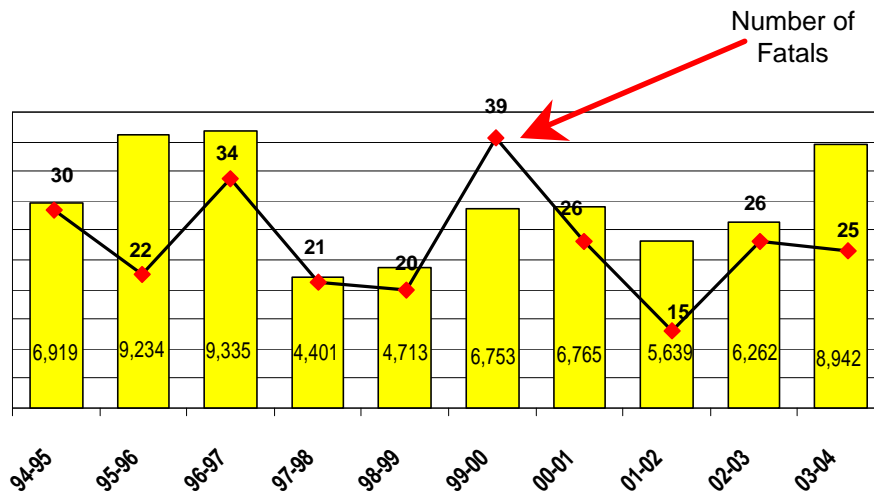
History of Certified Snowmobile Students

Certification requires a student to complete a basic Wisconsin snowmobile training course. Course content includes: knowing your snowmobile, maintenance and repair, riding, personal safety, winter survival, laws, courtesy and ethics.



History of Snowmobile Fatality Rate to Warden Enforcement Hours

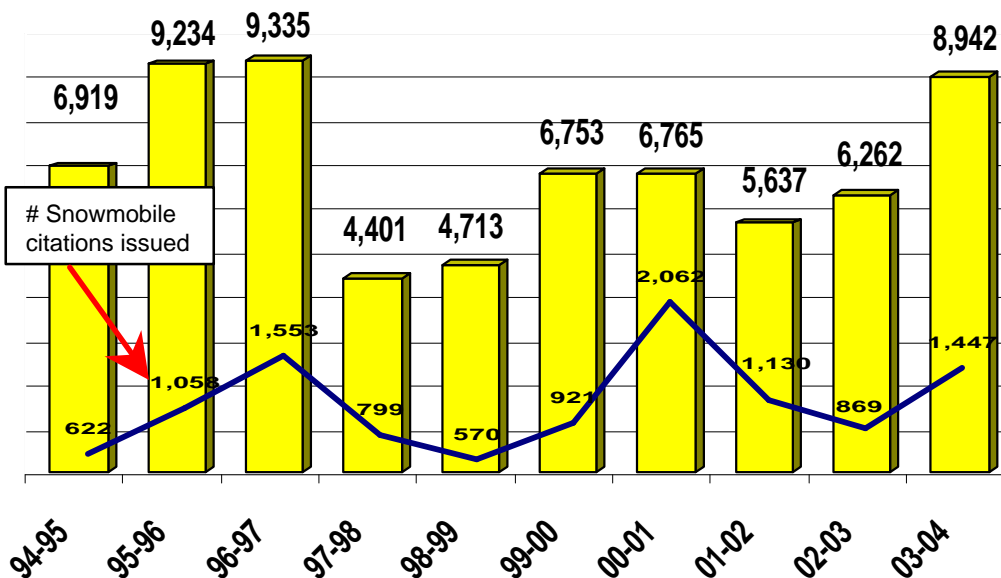
Warden Enforcement Hours



In 1999-2000, the department changed the tracking method used to collect data on the hours spent for enforcement issues. As a result, enforcement hours no longer include time involved with court, snowmobile maintenance, etc. and are more representative of the actual enforcement hours used.

History of Snowmobile Citation Rate to Warden Enforcement Hours

Warden Enforcement Hours



The citations for sheriff patrols and wardens were combined for the first time 2000-2001.

Prior to 2000-2001, the citations listed are for wardens only.

*See page 13 for explanation.

2003-2004, the average blood alcohol level for all victims reached 0.144.

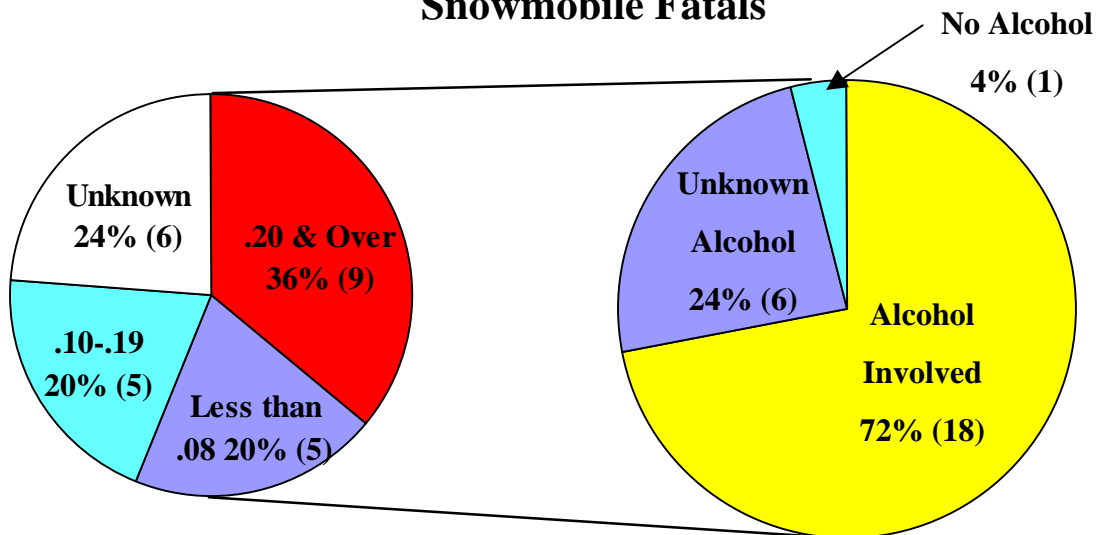
The average victim blood alcohol levels for 2002-2003 decreased to 0.144.

The 2003-2004 season showed that alcohol was a contributing factor in 72% of all fatalities.

One 2003-2004 alcohol involved fatal was recorded at 0.284

The average age for the victims killed was 35.2 years old as compared to 35.3 years in 2002-2003.

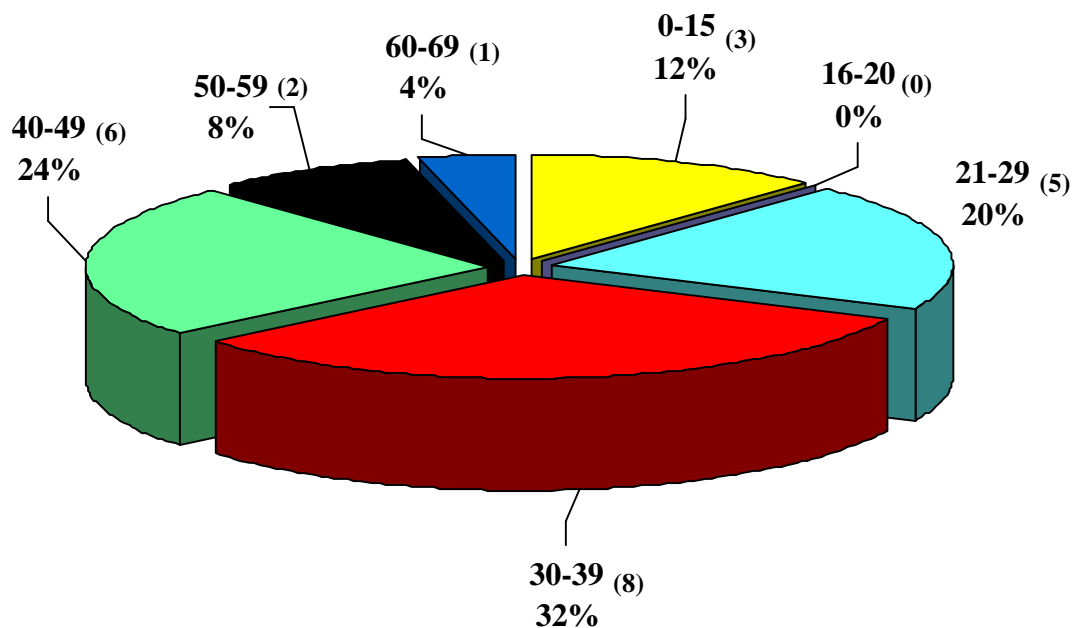
2002-2003 Alcohol Involved Snowmobile Fatalities



- Numbers in () represents number of victims.

- Blood alcohol content is grams/ml.

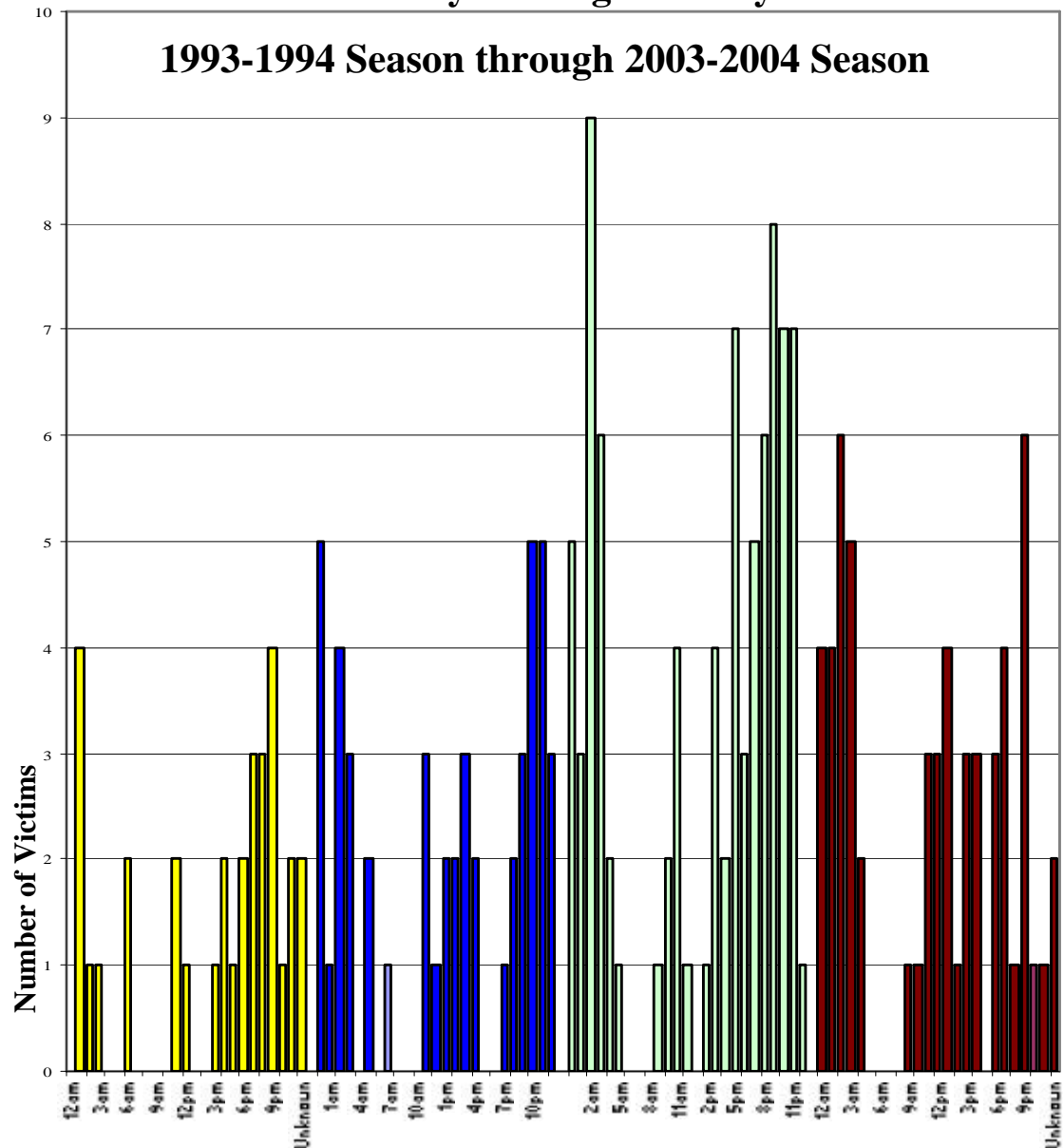
2003-2004 Age of Snowmobile Fatality Victims



Snowmobile Fatal Incidents by Time of Day

Thursdays through Sundays

1993-1994 Season through 2003-2004 Season



Fatal incidents have the highest frequency of occurrence on Saturday and Sundays.

The early morning hours generally involve single operator incidents.

Thursday

Friday

Saturday

Sunday

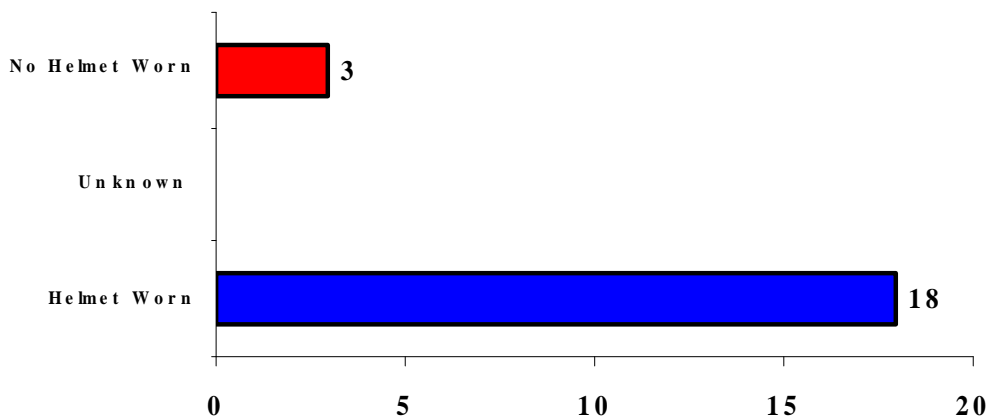
Victims traditionally wear helmets.

Unknown helmet use is because the victim was missing (drowned) or the helmet was not on the victim at the time of discovery.

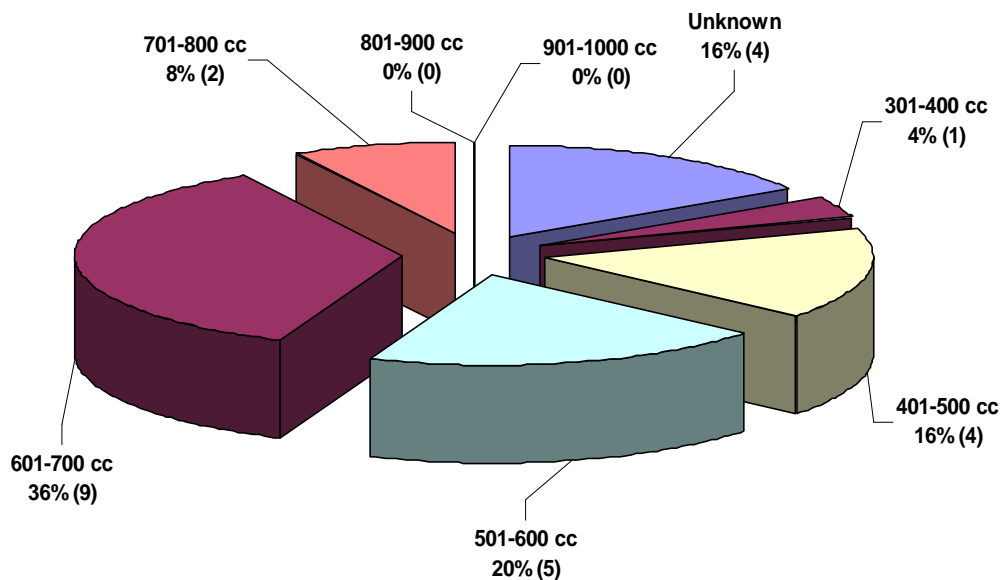
Historically, the 500 CC engine-powered snowmobile has made up the greatest number of snowmobiles involved in fatal incidents.

2003-2004 Fatal Snowmobile

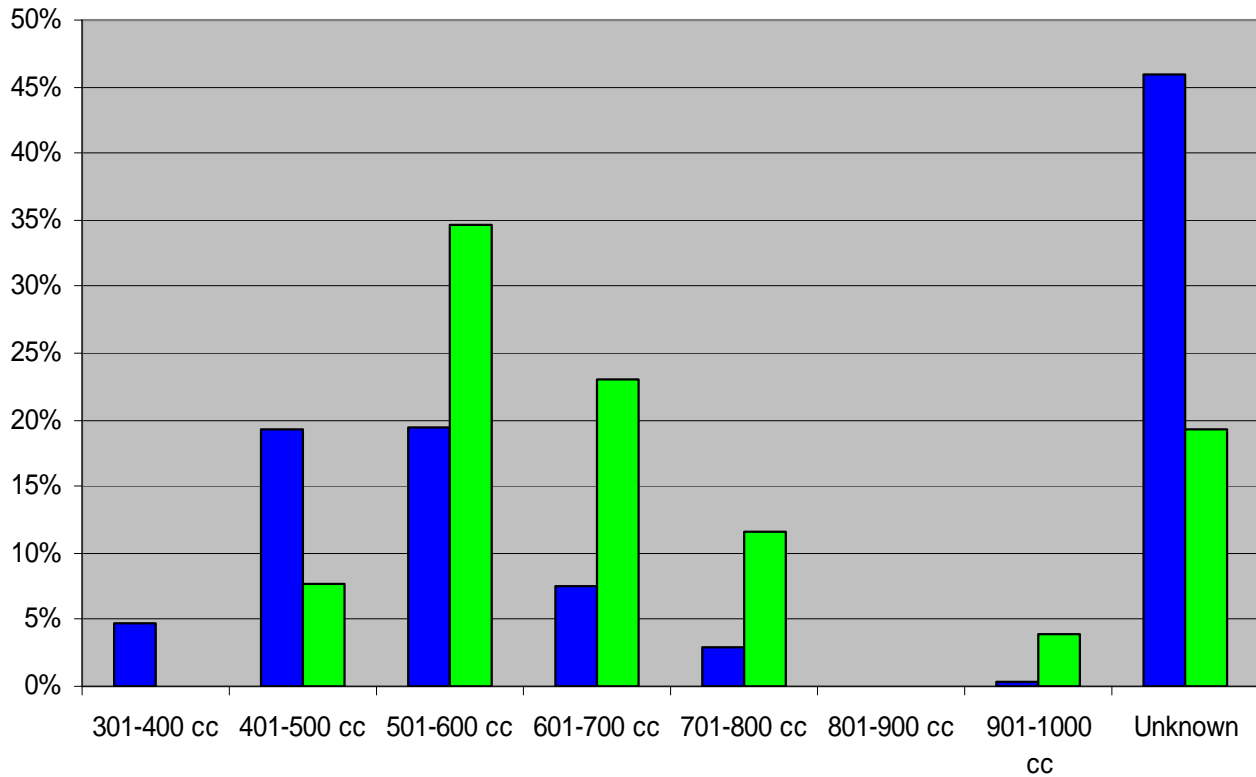
Victim Helmet Use



2003-2004 Snowmobile Engine Displacement for Machines Involved in Fatal Snowmobile Incidents



2003-2004 All Wisconsin Registered Snowmobiles Engine Displacement Compared to Victim Machines



2003-04 Fatal Victim Snowmobiles
 2003-04 All WI Snowmobiles
 Engine Displacement Determined by Registration Analysis

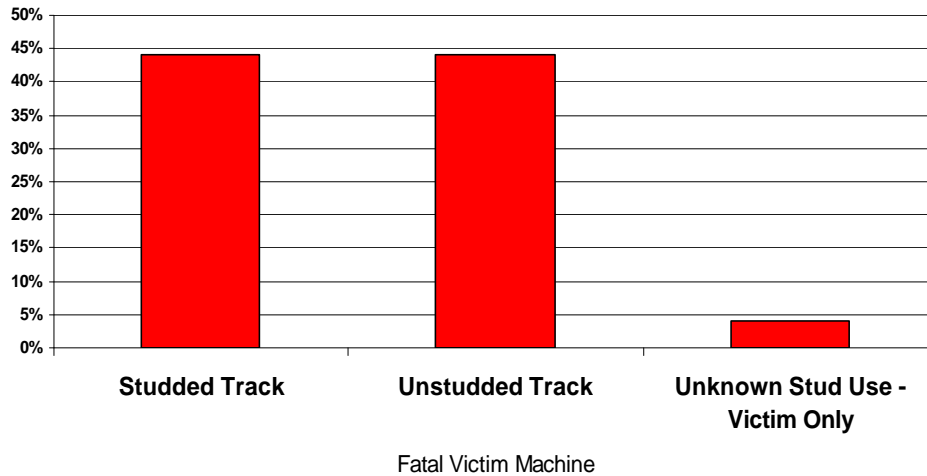
The Wisconsin snowmobile registration system contained unknown entries that either did not report a CC engine size displacement or the machine's engine capacity was recorded in horsepower units.

A survey of snowmobilers conducted in October 2001 indicates that 46.6% of the surveyed snowmobilers used studded tracks.

Source - Governor's Snowmobile Recreation Council, 10-12-01

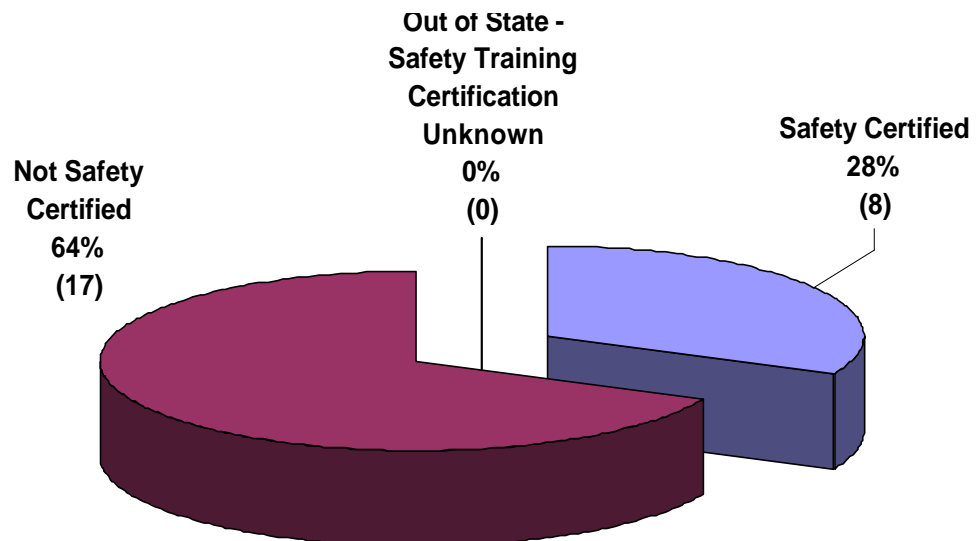
2003-2004 Studded Snowmobile Track

Fatality Victim's Use



2003-2004 Fatal Snowmobile Victim Operators with Wisconsin DNR Safety Training Certification

Beginning January 1, 2001, a Snowmobile Safety Certificate became required for all operators born on or after January 1, 1985.



2003-2004 Citations Issued for Snowmobile Violations

Total Citations	1,447
Operate Snowmobile w/o Valid Registration (S-1)	237
Fail to or Improper Display of Registration Number or Decal (S-2)	112
Operate Snowmobile w/o Possession of Valid Certificate (S-3)	168
Fail to Transfer Registration of Snowmobile (S-4)	16
Give Permission to Operate a Snowmobile not Registered (S-5)	47
Transport Uncased Strung Bow on a Snowmobile (S-09)	2
Shoot From a Snowmobile (S-10)	1
Operate in Prohibited Area on Lands Controlled by DNR (S-11)	13
Highway and Roadway Violations (S-12)	184
Equipment Violation (S-14)	6
Permit Operation by Person Incapable Because	
of Age, Physical or Mental Disability (S-15)	32
Fail to Report Snowmobile Accident (S-16)	8
Operate at/in Unreasonable, Improper or Careless Speed/manner (S-17)	74
Fail to Display Lights when Required (S-18)	1
Trespass 'Sec. 350.10(6) through (13) Wis. Stats.' (S-19)	51
Miscellaneous (S-20)	4
Dealer Failing to Collect Fee & Submit Registration Applications (S-21)	0
Fail to Stop for Law Enforcement Officer (S-22)	2
Fail to Render Aid (S-23)	2
Operate Snowmobile while Intoxicated (S-24)	50
Operate Snowmobile with Alcohol Concentration Above .1% (S-25)	36
Refuse to Take Intoxicated Snowmobile Test (S-26)	8
Absolute Sobriety for Persons Under 19 (S-27)	1
Operate Snowmobile that Makes Excessive or Unusual Noise (S-28)	80
Operate Snowmobile w/o Muffler on Engine (S-29)	7
Cause Injury by Intoxicated Operation of Snowmobile (S-30)	1
Operate w/o Trail Use Sticker (S-33)	137
Operate (Manufacture or Seller) Snowmobile w/o Functioning Muffler (S-34)	4
Fail to Comply with Regulatory Signs (S-35)	147
Operate snowmobile w/o proof of training certificate (S-36)	25

Citations reflect Sheriff Patrol and Conservation Warden data.

Wisconsin Snowmobile Fatality Summary – 2003/2004 Season

#	Date	Location	Type & Cause of death - Primary/Secondary	Age/ Sex	BAC/ Residency	Safety Certified
1.	11/2/03	Town of Porterfield	Struck a utility pole/trees	24	.243	No
	02:45	Marinette County (Public Rd.)	Alcohol / Speed / Head Trauma	Male	WI	

The victim was operating on dry asphalt in the center of the roadway and went through a T-intersection hitting a utility pole guy wire, at that point the victim and snowmobile were impaled on a cluster of trees.

#	Date	Location	Type & Cause of death - Primary/Secondary	Age/ Sex	BAC/ Residency	Safety Certified
2.	12/13/03	Town of Webb Lake	Struck the shoreline and trees	47	.125	No
	23:45	Burnett County (Lake)	Hypothermia / Head Injury / Alcohol	Male	WI	

Friends went out looking for the victim after he was reported missing on 12/14/03. It appears he was traveling on trail five on Big Bear Lake, missed the trail and struck the shoreline and then a tree.

#	Date	Location	Type & Cause of death - Primary/Secondary	Age/ Sex	BAC/ Residency	Safety Certified
3.	1/9/04	City of Milwaukee	Struck a steel guide wire	15	Unk.	No
	20:28	Milwaukee Co. (Road)	Trauma / Impact Injury	Male	WI	

The victim hit a guy wire with his snowmobile and was found shortly thereafter by friends who were snowmobiling in the same area.

#	Date	Location	Type & Cause of death - Primary/Secondary	Age/ Sex	BAC/ Residency	Safety Certified
4.	1/10/04	Town of Black Wolf	Struck an ice shove and thrown from the machine	31	.112	No
	19:57	Winnebago County (Lake)	Alcohol / Head Trauma / Impact Injury	Male	WI	

The victim was traveling approx. 40-50 mph., hit an ice shove and was thrown from the snowmobile.

#	Date	Location	Type & Cause of death - Primary/Secondary	Age/ Sex	BAC/ Residency	Safety Certified
5.	1/10/04	Town of Sumner	Struck Trees / Rocks	41	.226	No
	22:19	Jefferson County (Lake)	Chest & Neck Trauma / Speed / Alcohol / Unfamiliar with area.	Male	IL	

While traveling at a high rate of speed the victim struck at least one rock and several trees and was then either knocked off or fell off the snowmobile.

#	Date	Location	Type & Cause of death - Primary/Secondary	Age/ Sex	BAC/ Residency	Safety Certified
6.	1/15/04	City of Ashland	Fell through ice.	44	.204	Yes
	02:19	Ashland County (Lake)	Hypothermia / Drowning / Alcohol	Male	WI	

A report came in from a witness who said he had seen a snowmobile light on the ice of Lake Superior and stated shortly after it disappeared. A hovercraft was dispatched and a single snowmobile track was found going into the hole, with no tracks leading out of the area. A glove, helmet and boot were located floating in the open water. Victim later found.

#	Date	Location	Type & Cause of death - Primary/Secondary	Age/ Sex	BAC/ Residency	Safety Certified
7.	1/18/04	Town of Minocqua	Struck Trees	60	.182	No
	03:15	Oneida County (Trail)	Alcohol / Speed / Head Injury	Male	WI	

The victim attempted to navigate a left-hand curve on a slight downhill grade when he struck two trees. Estimated speed at the time of accident is approx. 50 mph.

#	Date	Location	Type & Cause of death - Primary/Secondary	Age/ Sex	BAC/ Residency	Safety Certified
8.	1/20/04	Town of Gillett	Struck Trees	15	Unk.	Yes
	20:18	Oconto County (Private Property)	Speed / Head Trauma	Male	WI	

The victim was test driving his machine in a hayfield after making some repairs and it appears that after going over a hill he went airborne and crashed into some trees.

#	Date	Location	Type & Cause of death - Primary/Secondary	Age/ Sex	BAC/ Residency	Safety Certified
9.	1/21/04	Town of Omer	Struck Trees	33	.202	No
	02:09	Iron County (Trail)	Alcohol / Head Trauma	Male	MN	

The victim was traveling on a trail and struck the trees.

#	Date	Location	Type & Cause of death - Primary/Secondary	Age/ Sex	BAC/ Residency	Safety Certified
10.	1/23/04	Town of Lakewood	Collision with trees.	47	Unk.	No
	10:50	Oconto County (Trail)	Internal Injuries / Trauma / Impact Injury / Speed	Male	WI	

The victims snowmobile left the trail and struck some small trees, coming to a rest against several large trees. The victim was found underneath his snowmobile.

#	Date	Location	Type & Cause of death - Primary/Secondary	Age/ Sex	BAC/ Residency	Safety Certified
11.	1/25/04	Town of Germantown	Fell through ice.	42	.188	Yes
	22:30	Juneau County (Lake)	Drowning / Exposure / Alcohol	Male	WI	

When the victim failed to arrive at home after leaving the tavern a search party was formed and the victim was found near his snowmobile in the lake at the mouth of the Little Yellow River.

#	Date	Location	Type & Cause of death - Primary/Secondary	Age/ Sex	BAC/ Residency	Safety Certified
12.	1/30/04	Town of Fifield	Struck trees.	33	.025	No
	19:30	Price County (Trail)	Alcohol / Head Injuries / Speed / Inexperience	Female	WI	

The victim traveled about 200 yards and failed to negotiate a right hand turn just past the crest of a hill. The victim struck a 5 ½ inch popple tree breaking and uprooting the tree. The victim was transported to a hospital and air lifted to another where she was pronounced dead on 2/4/04.

#	Date	Location	Type & Cause of death - Primary/Secondary	Age/ Sex	BAC/ Residency	Safety Certified
13.	1/31/04	Town of Mountain	Hit by a snowmobile.	52	.000	No
	01:08	Oconto County (Pond)	Speed / Inexperience	Male	WI	

The victim, who was the leader in a group of three snowmobiles, was ahead of the others and rolled his snowmobile and was standing on the ice when he was struck by the second snowmobile in the group.

#	Date	Location	Type & Cause of death - Primary/Secondary	Age/ Sex	BAC/ Residency	Safety Certified
14.	2/1/04	Town of Excelsior	Collision with stalled snowmobile	34	.010	No
	15:15	Sauk County	Alcohol / Closed head injury.	Male	WI	

The victim struck a stalled snowmobile over the crest of a hill and was ejected from his machine. The incident happened on 2/1/04 causing head injury. The victim passed away on 2/25/04.

#	Date	Location	Type & Cause of death - Primary/Secondary	Age/ Sex	BAC/ Residency	Safety Certified
15.	2/7/04	Town of Sugar Camp	Hit by automobile.	15	Unk.	No
	15:36	Oneida County (Roadway)	Inexperience / Failure to yield	Male	WI	

The victim failed to stop for a stop sign and drove into the path of an automobile on the highway.

#	Date	Location	Type & Cause of death – Primary/Secondary	Age/ Sex	BAC/ Residency	Safety Certified
16.	2/8/04	Town of Caledonia	Hit by snowmobile	39	.220	No
	24:45	Racine County (Trail)	Alcohol / Asphyxia / Severe Leg Trauma	Male	WI	

The victim lost control of his snowmobile causing him to fall off. He was lying in the middle of the trail when a second snowmobile, operated by another person in the same group, ran him over.

#	Date	Location	Type & Cause of death – Primary/Secondary	Age/ Sex	BAC/ Residency	Safety Certified
17.	2/9/04	Township of Carey	Ran over by snowmobile	52	Unk.	No
	21:53	Iron County (Roadway)	Heart Attack	Male	MN	

It appears that the victim had fallen off his snowmobile and had been pulled by the track into the rear of the snowmobile.

#	Date	Location	Type & Cause of death - Primary/Secondary	Age/ Sex	BAC/ Residency	Safety Certified
18.	2/13/04	Town of Belgium	Struck trees.	25	.020	No
	23:00	Ozaukee County (Trail)	Alcohol / Speed	Male	WI	

The victim took off at a high rate of speed through a wooded area on a snowmobile trail, missed a curve and hit the trees.

#	Date	Location	Type & Cause of death - Primary/Secondary	Age/ Sex	BAC/ Residency	Safety Certified
19.	2/14/04	Town of Almena	Struck trees.	28	Unk.	No
	02:57	Barron County (Trail)	Hypovolemic Shock	Male	WI	

After failing to negotiate a curve in the trail the victim went off the trail and struck a group of trees.

#	Date	Location	Type & Cause of death - Primary/Secondary	Age/ Sex	BAC/ Residency	Safety Certified
20.	2/18/04	Town of St. Germain	Collision with other snowmobile	38	.079	No
	22:30	Vilas County (Lake)	Internal Injuries / Alcohol / Speed	Male	IL	

Investigation indicates that snowmobiles were involved in an informal race on the lake. Estimated speed at the time of incident is approx. 95-110 mph. The incident happened near the end of the race when it appears that vehicle A struck vehicle B causing vehicle B to tumble over several times in a clockwise fashion while vehicle A began to tumble several times in a counter-clockwise fashion.

#	Date	Location	Type & Cause of death - Primary/Secondary	Age/ Sex	BAC/ Residency	Safety Certified
21.	2/19/04	Village of North Hudson	Fell in open water.	29	.250	No
	04:00	St. Croix County (River)	Alcohol / Drowning / Hypothermia	Male	WI	

The victim failed to stop in time and encountered open water near the dam.

#	Date	Location	Type & Cause of death - Primary/Secondary	Age/ Sex	BAC/ Residency	Safety Certified
22.	2/19/04	Town of Cleveland	Struck trees.	25	.284	No
	09:00	Jackson County (Trail)	Head Trauma / Speed / Alcohol	Male	WI	

The victim lost control of the snowmobile and did not make the turn onto the trail. The victim then went air born and was thrown from the snowmobile into a tree.

#	Date	Location	Type & Cause of death – Primary/Secondary	Age/ Sex	BAC/ Residency	Safety Certified
23.	2/28/04	Town of Fifield	Struck shoreline / trees	33	.249	No
	01:00	Price County (Lake)	Speed / Alcohol / Trauma / Impact Injury	Male	IL	

The victim was third in a line of four snowmobiles and it is unclear what took place as other members of the snowmobile party did not observe the incident. The victim's snowmobile went airborne for 15 feet 6 inches and landed at the base of some oak trees. The snowmobile hit the tree where the right front ski connects to the snowmobile.

#	Date	Location	Type & Cause of death - Primary/Secondary	Age/ Sex	BAC/ Residency	Safety Certified
24.	2/29/04	Town of Dairyland	Struck trees.	44	.202	No
	24:35	Douglas County (Road)	Speed / Alcohol / Head and Internal Injuries	Male	WI	

The victim was traveling at a high rate of speed on the trail across the lake. The victim traveled to the right of the trail striking the shoreline and a stump. The victim was thrown from the snowmobile and struck a tree.

#	Date	Location	Type & Cause of death - Primary/Secondary	Age/ Sex	BAC/ Residency	Safety Certified
25.	3/15/04	Town of Mercer	Struck by snowmobile	36	.162	No
	03:00	Iron County (Trail)	Alcohol / Neck / Internal Injuries	Male	IL	

The victim had gone around a corner and down a hill and had likely slowed down or stopped. He was then struck by the following snowmobile.

SLOW DOWN
...RIDE SOBER...
&
RIDE FOR LIFE

This image shows a full page of white paper with horizontal blue ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.